

12-24-2003



To the Assistant Commissioner for Patents, 102632697, its or copy thereof.

<p>1. Name of conveying party(ies): (1) Toshiharu Furukawa (2) Mark Charles Hakey (3) Steven John Holmes (4) David Vaclav Horak (5) Charles William Koburger, III (6) Peter H. Mitchell (7) Larry Alan Nesbit Additional names of conveying party(ies) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p> <p>3. Nature of Conveyance <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other</p> <p>Execution Date: (1) December 3, 2003; (2) December 3, 2003; (3) November 18, 2003; (4) November 19, 2003; (5) November 18, 2003 (6) December 3, 2003; (7) December 3, 2003</p>	<p>2. Name and address of receiving party(ies): Name: <u>International Business Machines Corporation</u> Internal Address: Street Address: <u>New Orchard Road</u> City <u>Armonk</u> State <u>New York</u> Zip <u>10504</u> Additional name(s) & address(es) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p>
---	---

17497 U.S. PTO
10732951

121103

<p>4. Application number(s) or patent number(s): TITLE: SELECTIVE SYNTHESIS OF SEMICONDUCTING CARBON NANOTUBES If this document is being filed together with a new application, the execution date of the application is (1) December 3, 2003. (2) December 3, 2003; (3) November 18, 2003; (4) November 19, 2003; (5) November 18, 2003; (6) December 3, 2003; (7) December 3, 2003.</p> <table border="0"><tr><td>A. Patent Application No(s).</td><td>B. Patent No(s).</td></tr><tr><td>Docket No. ROC920030269US1</td><td></td></tr></table> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		A. Patent Application No(s).	B. Patent No(s).	Docket No. ROC920030269US1	
A. Patent Application No(s).	B. Patent No(s).				
Docket No. ROC920030269US1					

<p>Name and address of party to whom correspondence concerning document should be mailed:</p> <p>James R. Nock IBM Corporation - Dept. 917 3605 Highway 52 North Rochester, MN 55901-7829</p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41): <u>\$ 40.00</u> <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input checked="" type="checkbox"/> Total fee due <input checked="" type="checkbox"/> Any deficiencies in the enclosed fees</p> <p>8. Deposit account number: <u>09-0465</u> (Attach duplicate copy of this page if paying by deposit account)</p>
---	---

DO NOT USE THIS SPACE

<p>9. Statement and signature To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</p> <table border="0"><tr><td>James R. Nock, Reg. No. 42,937 Name of Person Signing</td><td> Signature</td><td>December 11, 2003 Date</td></tr></table> <p>Total number of pages comprising cover sheet: 1</p>		James R. Nock, Reg. No. 42,937 Name of Person Signing	 Signature	December 11, 2003 Date
James R. Nock, Reg. No. 42,937 Name of Person Signing	 Signature	December 11, 2003 Date		

12/23/2003 ECOOPER 00000000 090465 10732951

01 FC:0021

40.00 BA

ASSIGNMENT

WHEREAS, we, **Toshiharu Furukawa**, residing at **Nine Oakwood Lane, Essex Junction, Vermont 05452**, and **Mark Charles Hakey**, residing at **15 Bellows Street, Fairfax, Vermont 05454**, and **Steven John Holmes**, residing at **103 Guilder Lane, Apt. 11, Guilderland, New York 12084**, and **David Vaclav Horak**, residing at **47 Briar Lane, Essex Junction, Vermont 05452**, and **Charles William Koburger, III**, residing at **40 Roweland Avenue, Delmar, New York 12054-3032**, and **Peter H. Mitchell**, residing at **390 Vermont Route 15, Jericho, Vermont 05465**, and **Larry Alan Nesbit**, residing at **458 Wildflower Circle, Williston, Vermont 05495**; made certain new and useful inventions and improvements for which we executed an application for Letters Patent of the United States on December 3, 2003, December 3, 2003, November 18, 2003, November 19, 2003, November 18, 2003, December 3, 2003, and December 3, 2003, respectively, which is entitled **SELECTIVE SYNTHESIS OF SEMICONDUCTING CARBON NANOTUBES**.

AND WHEREAS, **INTERNATIONAL BUSINESS MACHINES CORPORATION**, a corporation organized and existing under and by virtue of the laws of the State of **New York**, and having an office and place of business at **New Orchard Road, Armonk, New York 10504** (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

12/03/03
Date

Toshiharu Furukawa
Toshiharu Furukawa

12/03/03
Date

Mark Charles Hakey
Mark Charles Hakey

11/18/03
Date

Steven John Holmes
Steven John Holmes

11/19/03
Date

David Vaclav Horak
David Vaclav Horak

11/18/2003
Date

Charles William Koburger, III
Charles William Koburger, III

12/3/03
Date

Peter H. Mitchell
Peter H. Mitchell

12/3/03
Date

Larry Alan Nesbit
Larry Alan Nesbit